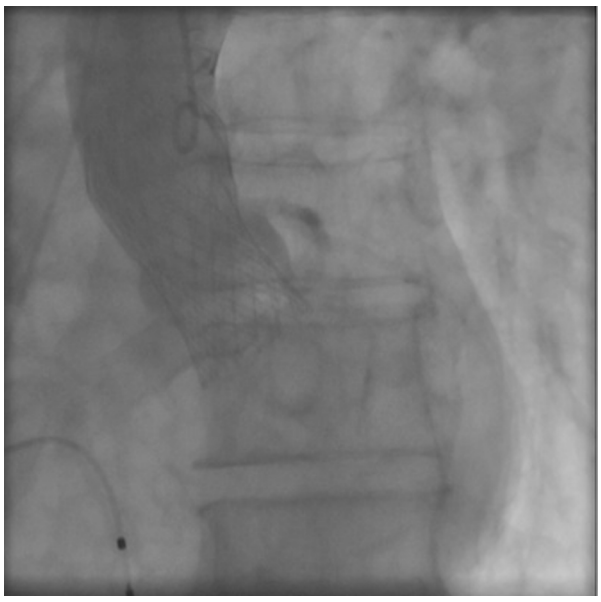

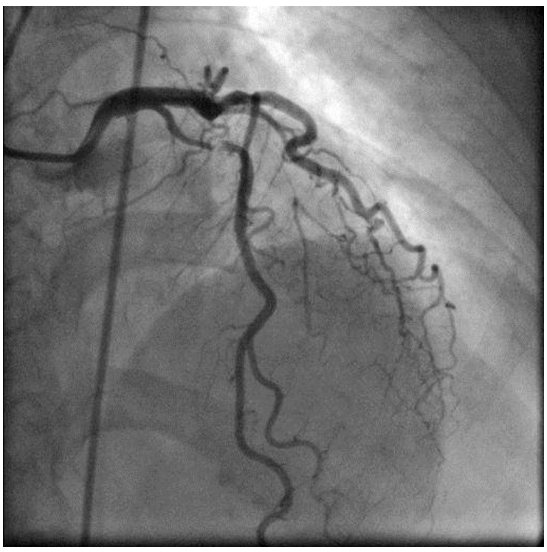

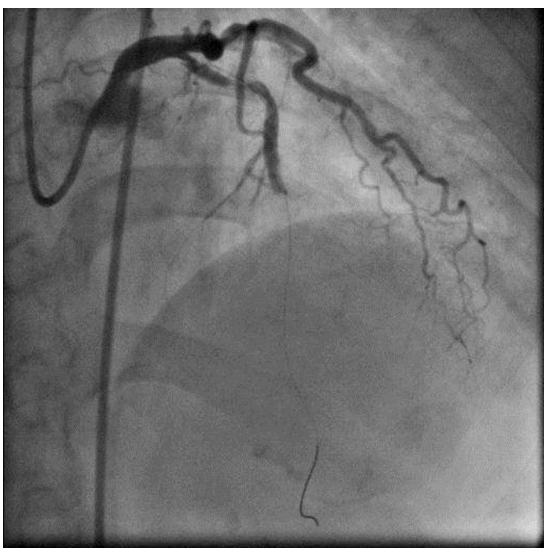

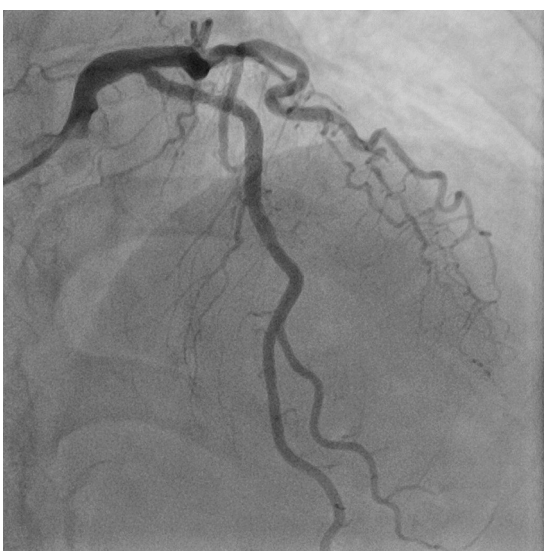

Vulnerable Plaque Diagnosis and Treatment (TCTAP C-236)

TCTAP C-236

The Overlooked Lesion Made Repetitive No-flow

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[Clinical Information]
Patient initials or identifier number:
LHM
Relevant clinical history and physical exam:
72 y/o woman with diabetes mellitus, hyperlipidemia, hypertension and left pons ischemic stroke, had exertional angina off and on in past 2 months
Physical Examination: decrease right side muscle power, otherwise not remarkable.
Relevant test results prior to catheterization:
T-CHO 215 mg/dL, HDL 40 mg/dL, HbA1C: 5.4%, CRE: 0.8 mg/dL.
Thallium Scan: (1) significant stress-induced ischemia mixed with scarred myocardium, post-stress = 44% (2) Regional Wall Motion: hypokinesia at apex. (3) Transient stress-induced LV dilatation.
Relevant catheterization findings:
Significant proximal LAD stenosis to 90-95% with patent LM.
Insignificant lesion over LCX and RCA.
[Interventional Management]
Procedural step:
We use 6F AL1 guiding catheter and pass SION wire to distal LAD. Balloon angioplasty was done with Sprinter Legend 2 X 15mm in order to fascilitate IVUS study. IVUS examination with Boston Scientific Atlantis SR Pro 40 MHz showed vessel size to 3.5-3.75 mm with attenuated plaques. Further balloon angioplasy was done with Abbott TREK 3.5 X 15 mm. But acute no-flow developed. We first deployed Boston Scientific Promus Element 3.5 X 32 mm but were unable to establish adequate coronary flow. Therefore, we administered IC nitroglycerin and tirofiban. TIMI 1-2 flow was achieved and stent edge dissection was noted. Further balloon angioplasy was done with Abbott TREK 3.5 X 15 mm over the stent edge. Unfortunately, No-flow developed again. This time, we use Kaneka Thrombuster 6Fr for thrombosuction and also administered IC adenosine and additional dose of heparin 2500 U. TIMI 3 flow was achieved and stent edge dissection remained. To cover the stent edge, another Boston Scientific Promus Element 3.5 X 12 was implant which resulted in TIMI 3 flow. To end up the procedure, we performed final IVUS examination. To our surprise, there was thrombus inside the proximal stent. Immediate after IVUS study, no-flow developed again. We use Kaneka Thrombuster 6Fr for thrombosuction and aslo administered IC adenosine again. Followed angiography showed TIMI 3 flow, but one focal filling defect was noted inside the proximal stent. In concerned of acute stent thrombosis, balloon angioplasy was done with Abbott TREK 3.5 X 15 mm again with final TIMI 3 flow was achieved. She was transfer to ICU and continued heparin and tirofiban treatment.

Case Summary:
The patient received the elective LAD PCI. To my suprise, a total of 4 episodes of no-flow developed during the procedure with peri-procedure MI. The procedure steps need to be reconsidered again in order to prevent the complication from happening.